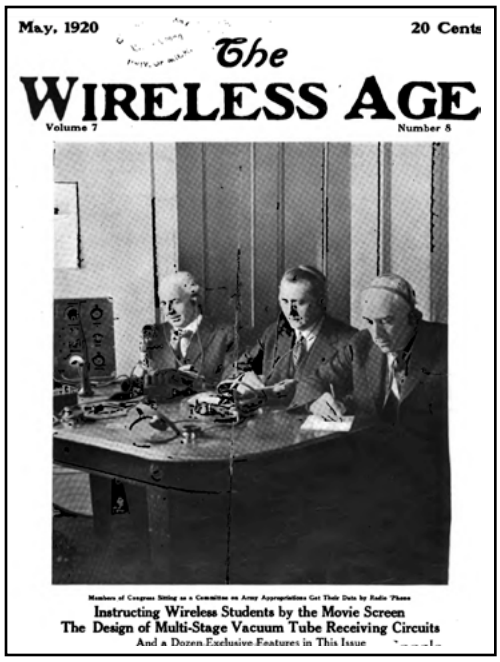
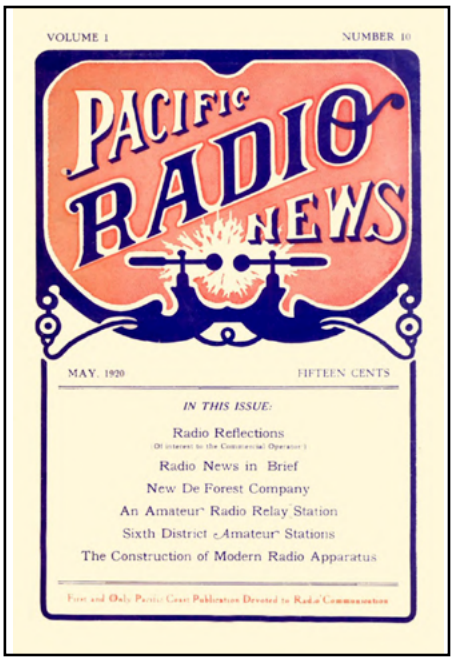
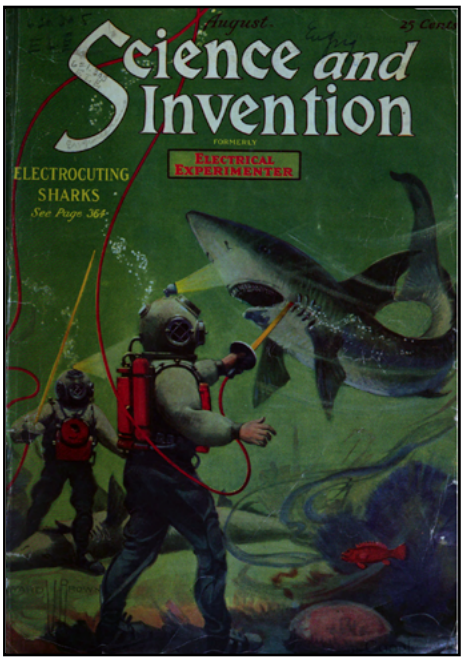






Left: The May 1920 cover of Wireless Age, already in its seventh year of publishing, shows members of Congress "sitting as a Committee on Army Appropriations getting their data by radio 'phone." Center: Pacific Radio News May 1920 issue with articles on "New De Forest Company," "An Amateur Radio Relay Station," "Sixth District Amateur Stations," and more. Right: August 1920 issue of Hugo Gernsback's Science and Invention magazine, the successor to Electrical Experimenter magazine that began in 1913, shows the change to science in general and speculative science that would eventually become science fiction. (Courtesy: americanradiohistory.com)

100 Years of Radio Series:

Radio Publications from 100 Years Ago

By Ken Reitz KS4ZR

One hundred years ago there were no mobile phones, television, cable-TV, satellite-TV, satellite radio or Internet and its unending number social media platforms. For cutting edge technology there were 78 rpm records and, as we see have been exploring this year, a global interest in the subject of wireless communications—an unprecedented sensation of the time. Aside from local clubs and various organizations that promoted this subject, how did aspiring radio enthusiasts further their interest in radio and keep up with the technology? The answer: magazines.

The Impact of Hugo Gernsback

It's hard to imagine the world of radio magazine publishing without knowing about Hugo Gernsback, who was born in Luxembourg City, Luxembourg, and found his way to America in 1904 at the age of 20. He began importing radio parts from Europe through his company, Electro Importing, Co., according to his obituary in *Radio-Electronics* magazine—one of many Gernsback publications. It was through this business that he became instrumental in the fledgling amateur radio hobby. To further that effort (and promote the products sold through his business), in 1908 he had founded *Modern Electrics* magazine, the first issue of which came out in April 1908 at a price of 10 cents and consisting of 36 pages.

Modern Electric would later become *The Electrical Experimenter* in 1920 and eventually *Science and Invention* through 1931. Gernsback used his publications to promote products he sold as well as advertisements for other manufacturers of all manner of electro-mechanical devices. He also wrote untold numbers of articles, many under pseudonyms, often detailing inventions of his own such as a device that "brews your coffee while you sleep" or an electric "sun alarm," to wake the user at sunrise.

The ambitious Gernsback founded the Wireless Association of America in 1908 (six years before the American Radio Relay League), which claimed 10,000 members within a year. It would not be the last of such organizations, which seemed less an organization than perhaps a mailing list. The WAA had no particular goal, requirements or cost in joining. One needn't be a licensed amateur to join—I found no evidence that Gernsback was ever licensed.

One can imagine that there was some sort of rivalry between Gernsback's WAA (and his publications, which also publicized his New York radio station WRNY) and Hiram Percy Maxim's ARRL, which he co-founded in April 1914 as a non-profit organization. I say imagine because, explor-

ing the *QST* archives, there's little material on the subject of Hugo Gernsback. There is a photo of Gernsback in the August 1957 issue under a "Strays" heading, that reads, "Hugo Gernsback, well-known publisher and inventor, presents a model of his 1905 Telimco wireless set, reported to be the first home radio marketed in the world, to Dr. Shelley of the Henry Ford museum."

QST did manage to note his death under a small "Strays" piece on page 76 of the January 1968 issue, next to the hamfest calendar and an announcement for the 1968 ARRL National Convention. Roland Bourne W1ANA, Chief Engineer of the Maxim Silencer Co., Hartford, Connecticut, wrote, "He will be remembered by all old timers as the founder of the Electro-Importing Company and *Modern Electrics* magazine. The E.I.Co. was about the only source of supply for ham gear in the early 1900s." The obit goes on to describe the E.I.Co. catalogs as "the 'bible' for hams in those days," and that, "the descriptive matter was practically irresistible." The obit concludes, "He had an almost prophetic vision in the field of science and most of the wonders be predicted have come to pass."

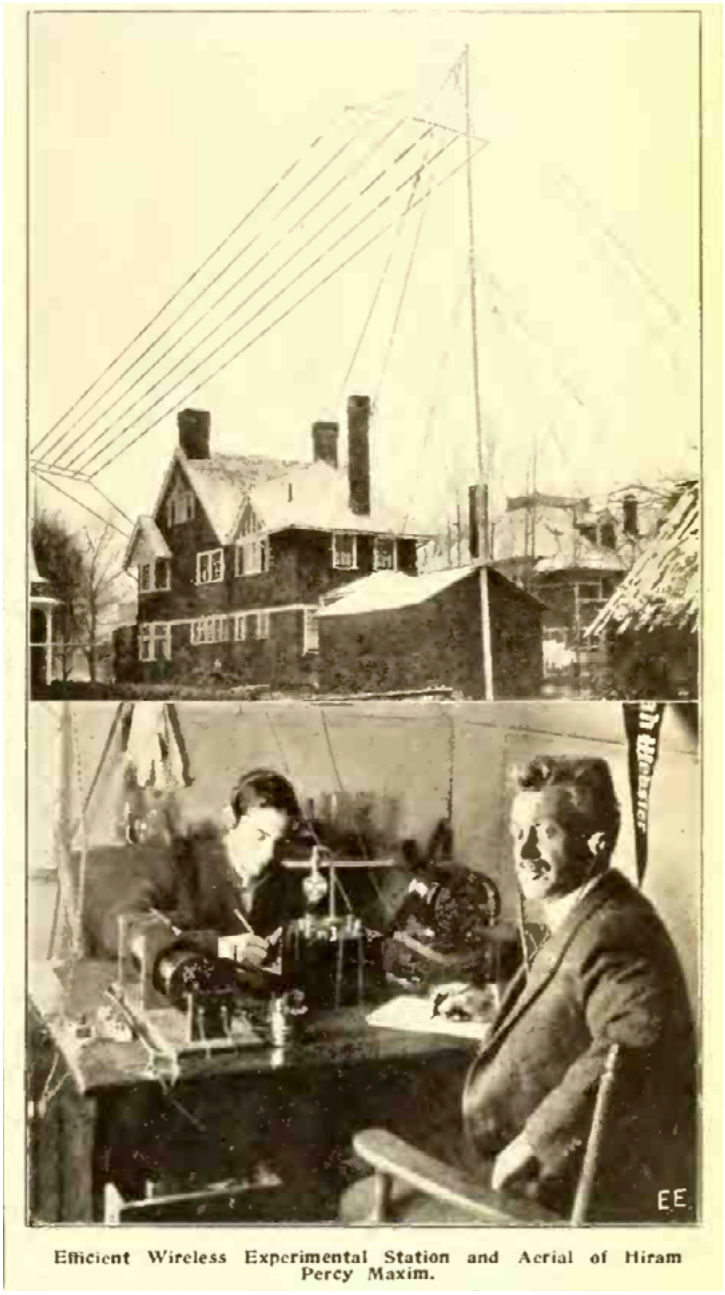
There was a three-page remembrance titled, "Remembering Hugo Gernsback," by Gil McElroy VE1PKD, which appears in the February 1995 issue (28 years after his death) that comes closest to restoring Gernsback to the pantheon of early amateur radio. McElroy traces the enmity between Gernsback and the League to an incident in 1916 when, "the *Electrical Experimenter* would refuse advertising from the ARRL as it saw *QST* and the League as a competitive threat to Gernsback's latest radio organization, the Radio League of America."

Today, Gernsback would be considered a workaholic, a go-getter, a hustler and a tireless promoter of modern inventions and speculator on those to come, which caused him to venture into the field of science fiction. He would eventually publish dozens of magazines in the radio/science fiction genre. When he died in 1967 at the age of 83, the *New York Times* declared him the "Father of modern science fiction, who predicted radar and beamed TV in 1928."

Of course, Gernsback had detractors, most notably among critics of his own science fiction writings. Gernsback didn't shy from publicity or controversy—he seemed to court both. He supported Lee de Forest's claim to have developed the Audion and having discovered regeneration, a claim that was famously disputed by Edwin Armstrong in a series of legal battles lasting years that eventually ended up in a US Supreme Court decision in De Forest's favor. De Forest's byline is seen in many early Gernsback publications and De Forest manufacturing advertised extensively in his magazines.

Gernsback was a great friend of Nikola Tesla and was credited with obtaining a pension from Westinghouse (referred to in the *Radio-Electronics* obituary as a "consulting retainer") for Tesla in the final years of his life.

He experienced an early "near financial collapse" in 1928, which the *Radio-Electronics* obituary notes emboldened his critics to dismiss him "as a harebrained crackpot." Throughout his life, Gernsback seemed to shrug off such characterizations, plowing ahead with his ideas about publishing, radio and science fiction.



Efficient Wireless Experimental Station and Aerial of Hiram Percy Maxim.

Happier times. A letter to the editor from ARRL co-founder, Hiram Percy Maxim, with photos of his home station and antenna as it appeared in the October 1915 issue of Hugo Gernsback's The Electrical Experimenter. In the letter Maxim describes in detail the station and use of the special 1ZM call sign as part of the American Radio Relay League. It's also hard to imagine such a contraption appearing in today's neighborhoods without strenuous objection. (Courtesy: Americanradiohistory.com)

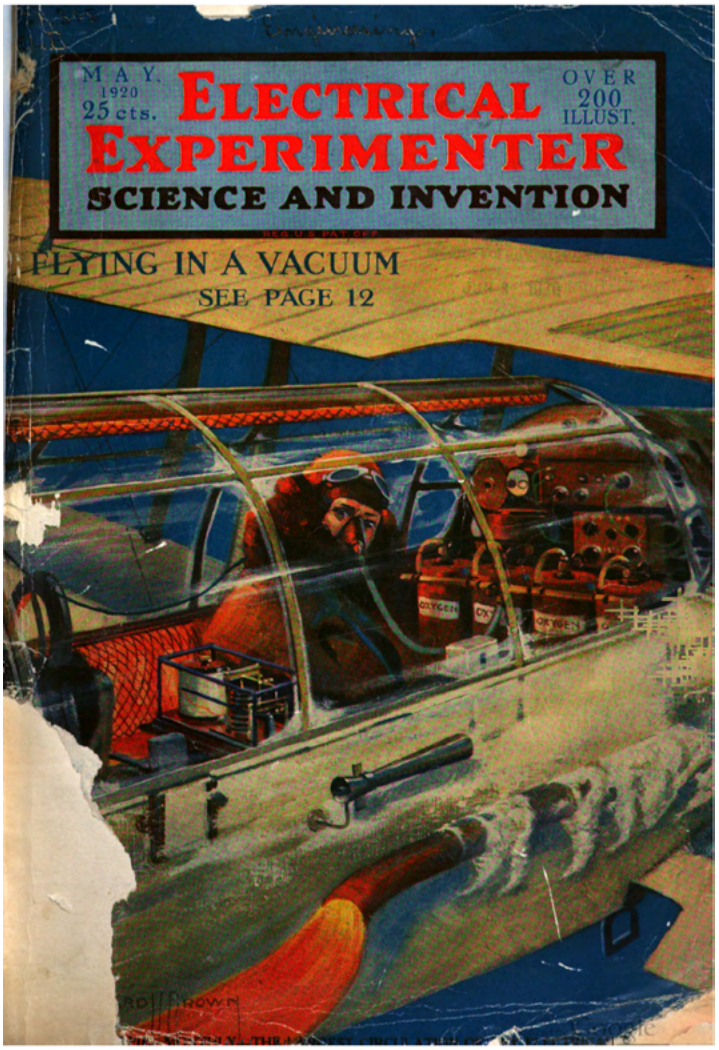
Despite Gernsback's position as an early pioneer of amateur radio, he gets little recognition from that fraternity today. Instead, he is more recognized in an even greater realm—the world of science fiction publishing. His restless imagination was always quick to leap from the capability of current electronics to what he imagined to be the future. That led to the founding of science fiction magazines includ-

ing *Amazing Stories* (which he apparently lost as part of his "near financial collapse" in 1928-29). But his questionable business practices regarding those who wrote for him and tireless self-promotion—his science fiction pieces often appeared as cover stories in his own publications under absurd pseudonyms—earned him an unfavorable reputation.

Regardless, there seems to be a grudging acknowledgment among science fiction cognoscenti, despite the negative publicity, that his publishing efforts helped to popularize the genre that has given the world such colossal franchises as Star Trek and Star Wars. Indeed, the awards given each year at the World Science Fiction Convention—the Hugo Awards—are named for him.

We can see many of these early publications thanks to the amazing collection at **www.americanradiohistory.com** to which all radio enthusiasts and history buffs should be thankful. But, when looking over all of the issues published from that long ago, modern readers may easily be offended at the occasional blatant ethnic and racial stereotyping that many publishers engaged in at the time.

As the 1920s wore on, more and more stations became licensed and the radio hobby changed from home-built to manufactured sets, programming become king and radio stars were born. From that point on, the publishing industry focused on the programs and stars much the way it would be during the golden age of TV in the 1950s and 60s. Still, if all of the publications started, run or absorbed by the Gernsback empire were taken out of the radio and science fiction landscape it would be quite bare. Here are just a few other radio publications of the era.



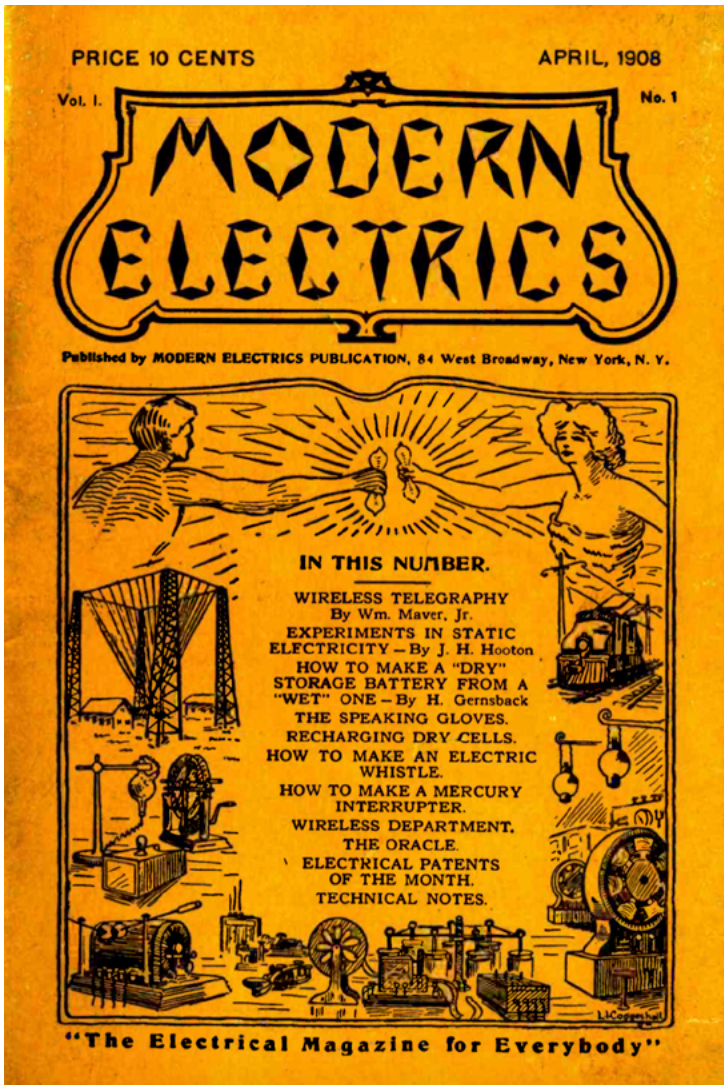
Above: The front cover of the May 1920 issue of Electrical Experimenter, successor to Modern Electrics, which began in 1908 and was a preview of the direction of Gernsback publications. Subtitled, "Science and Invention" it shows a blending of radio, science and fiction. The 116-page magazine was loaded with ads for would-be electronic technicians, chiropractors and body-builders. It catered to the amateur radio enthusiast and amateur scientist and was published from May 1913 until July 1920, when it became Science and Invention. Gernsback would later revisit this theme with Science and Mechanics magazine. (Courtesy: americanradiohistory.com)

Wireless Age

Wireless Age began with the October 1913 issue (the first official government regulations had been written just the year before—the Radio Act of 1912). However, *Wireless Age* had already been earlier published as a newsletter for the Marconi Corporation under the title, "Marconigraph." Even in the first issue of *Wireless Age* they made it clear that the magazine would continue to report on all Marconi Corporation news.

The 86-page first edition of *Wireless Age* is long on radio and electronic theory with reports from around the world of construction progress on high-powered Marconi radiotelegraph stations. In their five-page first issue introduction the editor notes, "Just one year ago we had an idea that a certain proportion of the American public would welcome a magazine devoted to wireless telegraphy. We set about to discover just how large an audience we could address, providing we reached each individual concerned with radio communication. From the best sources of information we could command, one hundred thousand seemed to be a fairly accurate estimate…practically all of these people were engaged in serious experimenting, or were devoting their energies to advancing the commercial phases of the art, they had no adequate medium of expression, had little opportunity of learning what their co-workers were accomplishing, and had been depending principally upon a few scattered text books, new and old, for a way around the difficulties they encountered."

Keep in mind that the first edition of *Wireless Age* predates the first issue of *QST* by more than two years and that in 1914, according to the *Radio Service Bulletin* (official publication of the Bureau of Navigation, Department of Commerce—the predecessor of the Federal Communications Commission), there were only 2,796 licensed amateur radio stations in the US. Some 97,000 people imagined to be interested in such a publication were not licensed amateurs. *Wireless Age* continued monthly publication until August 1925, when it was taken over by *Popular Radio* magazine, a Hugo Gernsback publication.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IN THIS NUMBER.
WIRELESS TELEGRAPHY
By Wm. Maver, Jr.
EXPERIMENTS IN STATIC ELECTRICITY – By J. H. Hooton
HOW TO MAKE A "DRY" STORAGE BATTERY FROM A "WET" ONE – By H. Gernsback
THE SPEAKING GLOVES.
RECHARGING DRY CELLS.
HOW TO MAKE AN ELECTRIC WHISTLE.
HOW TO MAKE A MERCURY INTERRUPTER.
WIRELESS DEPARTMENT.
THE ORACLE.
ELECTRICAL PATENTS OF THE MONTH.
TECHNICAL NOTES.
"The Electrical Magazine for Everybody"

The magazine that started it all: The first issue of Modern Electrics, April 1908. (Courtesy: americanradiohistory.com)

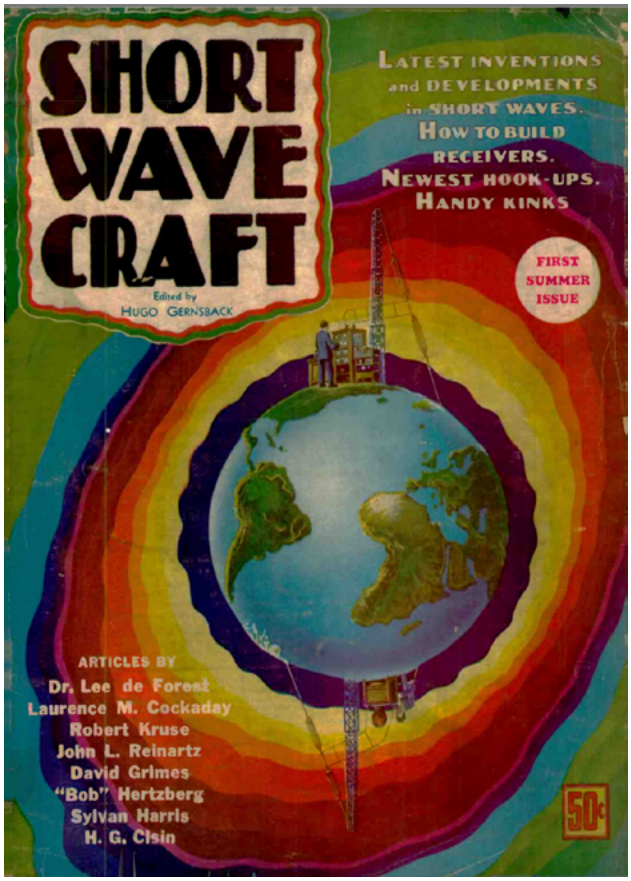
Pacific Radio News

Pacific Radio News began with the January 1917 issue and managed to get only five issues published before the start of WWI when, as many such periodicals did, publication was suspended for the duration of the war. It resumed publication with the January 1920 issue, continuing until November 1921 when it became known as "Radio."

Pacific Radio News billed itself as the "First and only Pacific Coast publication devoted to radio communication." Subscriptions were $1.50 per year ($2.00 in Canada and "foreign countries"), the equivalent of $20.06 in today's dollars. The monthly 36-page magazine contained 16 pages of advertisements.

Radio Review

At a pricey 35 cents per issue ($5.22 in today's money), *Radio Review* was "A digest of the latest radio hookups," edited by Sidney Gernsback, (Hugo's brother) and published by the Consrad Co., Inc. (at the same address as all his other publications). *Radio Review*, in addition to reprinting articles



The first issue of Short Wave Craft June/July 1930. (Courtesy: americanradiohistory.com)

previously published in other Gernsback publications, had many advertisements for various other Gernsback publications, including the "Radio Listener's Guide."

Short Wave Craft

Short Wave Craft was a bi-monthly publication that began with the June-July 1930 issue. Gernsback wrote in his introduction, "Just now, short-wave activities are certainly the hotbed of new radio developments." He claimed over 100,000 short-wave enthusiasts in the US and Canada alone, "who are daily listening to short-wave voice and music broadcasts." *Short Wave Craft* cost 50 cents per issue ($7.55 in today's money).

Radio and Television

Radio and Television (formerly *Short Wave Craft and Television*) made its debut with the October 1938 issue in which Gernsback noted that the name change was necessary in order to keep up with the times. Sensing the effect that TV would have on the nation, he pledged to continue in "helping to shape the radio destiny of those serious-minded young people, who are just getting under way in radio and who, ten years hence, will be the backbone of the radio industry itself." A prophetic statement and one that presaged the switch from an interest in television to an interest in personal computers that would take place decades later. TSM